

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Elijah SHAPIRA	Confirmation No.	1290
Serial No.:	09/707,541	Examiner:	Timothy M. Harbeck
Filed:	November 6, 2000	Group Art Unit:	3628
For:	METHOD AND APPARATUS FOR REAL-TIME REPORTING OF ELECTRONIC COMMERCE ACTIVITY		
Date:	June 19, 2006		

MAIL STOP Appeal Brief – Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPELLANT'S BRIEF  
UNDER 37 C.F.R. § 41.37**

Appeal is taken from the Examiner's Office Action mailed January 19, 2006, finally rejecting claims 1-9 in the instant application.

This Appeal Brief is in furtherance of the Notice of Appeal mailed in this case on April 19, 2006.

The fees required under §41.37(a)(2) and any required petition for extension of time for filing this Brief and fees therefor are dealt with through the payment section of the electronic filing system.

This Brief contains these items under the following headings, and in the order set forth below.

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### **I. REAL PARTY IN INTEREST**

#### **37 CFR § 41.37(c)(1)(i)**

The real party in interest in this appeal is WebTrends Inc., the assignee of the above-referenced patent application.

### **II. RELATED APPEALS AND INTERFERENCES**

#### **37 CFR § 41.37(c)(1)(ii)**

There are no other appeals or interferences known to Appellant, the Appellant's representative, or assignee that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

### **III. STATUS OF CLAIMS**

#### **37 CFR § 41.37(c)(1)(iii)**

- 1. Claims presented: I-9
- 2. Claims rejected: I-9
- 3. Claims allowed or confirmed: NONE
- 4. Claims withdrawn: NONE
- 5. Claims objected to: NONE
- 6. Claims cancelled: NONE

All the rejected claims, Claims 1-9, are being appealed. The appealed claims are eligible for appeal, having been finally rejected.

#### **IV. STATUS OF AMENDMENTS** **37 CFR § 41.37(c)(1)(iv)**

Subsequent to the last Office Action mailed on January 19, 2006, which contained a Final Rejection of the appealed claims, no further amendments have been filed.

#### **V. SUMMARY OF CLAIMED SUBJECT MATTER** **37 CFR § 41.37(c)(1)(v)**

There is one independent claim, 1, involved in this appeal.

The claims in the instant application are directed to a method for tracking and reporting electronic commerce activity over a web site. Briefly, visitors to commercial web sites often order products online. The particular web page visited includes code responsible for displaying the web page on the visitor's computer. The web page also includes "data mining code" implemented according to the invention. The data mining code is downloaded to the visitor computer along with the web page and operated on the visitor computer to obtain technical and commercial data directly from the visitor computer. That is, a visitor to a commercial web site would enter information into data fields of a web page, such as the type and number of products to be ordered, and the data mining code would be operated on the visitor computer to extract this entered information and transmit it to a second (*e.g.*, a third-party tracking) server. In this way, an employee for a commercial web site could browse to the commerce tracking website and review a report of commercial data compiled from data received from all visitor computers ordering products from the commercial web site tracked. Prior to this technique, commercial web sites would need their own commerce tracking servers where information is extracted directly from the web servers at the commercial site, rather than forked from the visitor computer directly and stored off-site.

An example of a transmission from the visitor computer created by the data mining code embedded within the commerce web page would be as follows (Application, page 5, lines 16-21):

The variable image source constructed by the inserted commercial activity tracking script can be shown as, for instance, [www.webtrends.live.com/button3.asp?usd-lawn\\_chair#1-1445-002-2499](http://www.webtrends.live.com/button3.asp?usd-lawn_chair#1-1445-002-2499), corresponding to price in U.S. dollars, product name: “lawn chair #1”, product category #1445, 2 units sold at a per unit price of \$24.99. Decoder software operable within server 22 reverse engineers the order to extract commercial activity data based on the source of the image requests.

#### A. Independent Claim 1

<b>Claim Language</b>	<b>Support in Specification/Figures</b>
<i>A method for tracking and reporting electronic commerce activity over a web site comprising:</i>	
<i>storing a web page on a first server coupled to a wide area network, said web page including data fields reflecting commerce transaction activity and data mining code;</i>	First (e.g., commercial) server: FIG. 1 (12) Web page shown at FIG. 2. Data fields shown in FIG. 2. Data mining code shown in Appendices I/11
<i>uploading the web page including the data fields and data mining code to a visitor computer responsive to a request over the wide area network from the visitor computer;</i>	Application page 3, lines 2-4. Visitor computer: FIG. 1 (14)
<i>accepting commerce information within the data fields of the web page at the visitor computer to form a completed web page;</i>	Data fields shown in FIG. 2 include quantity field and product type. Application, page 5, lines 10-15.
<i>operating the data mining code on the visitor computer to obtain technical and commercial data; and</i>	Application, page 4, lines 4-16 and page 5, lines 16-21.
<i>receiving the technical and commercial data at a second server.</i>	Second server: FIG. 1 (20)

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

### **37 CFR § 41.37(c)(1)(vi)**

Claims 1-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,128,624 (Papierniak, et al.) in view of U.S. Patent No. 6,505,242 (Holland, et al.).

**VII. ARGUMENT**  
**37 CFR § 41.37(c)(1)(vii)**

The general issue is whether claims 1-9 under 35 U.S.C. § 103(a) are unpatentable in view of the prior art references. Briefly, the specific issues can be stated as follows:

- A. Papierniak teaches just the type of prior art system (and accompanying drawbacks) that the present invention is intended to overcome.
  - a. Because Papierniak mines tracking and sensing data at the Internet Service Provider (ISP) rather than at the visitor computer itself, Papierniak does not teach the step of uploading a web page with data fields and mining code to the visitor computer as there would be no need to include such code within the web page.
  - b. Because Papierniak mines tracking and sensing data at the Internet Service Provider (ISP) rather than at the visitor computer itself, Papierniak does not teach the step of operating data mining code *on the visitor computer* to obtain technical and commercial data.
- B. Holland, just as Papierniak, teaches server-side data mining rather than one based on data mining code embedded within web pages. The Background of Invention section cited within Holland references two IBM products as examples of commercially available data mining software usable in the Holland invention – both software operate on the server and not the visitor computer. The Holland invention itself uses data mined information about visitor traffic patterns (using such the commercially available software) to construct a bundle of web pages that the visitor can then browse off-line. Since Holland intends to use the IBM products, such data mining only occurs on the server-side rather than the visitor side. Accordingly:
  - a. Because Holland mines tracking data at the bundling web server rather than at the visitor computer itself, Holland does not teach the step of uploading a web page with data fields and mining code to the visitor computer as there would be no need to include such code within the web page.

- b. Because Holland mines tracking data at the bundling web server rather than at the visitor computer itself, Holland does not teach the step of operating data mining code *on the visitor computer* to obtain technical and commercial data.
- C. Combining Holland and Papierniak would not teach all limitations of the claims and accordingly a prima facie case for rejection of the claims under §103(a) fails as a matter of law. Furthermore, there is no suggestion within the cited art to implement client-side commercial data mining through embedded script within the web page within server-side data mining systems such as Holland and Papierniak.

These issues will be divided into respective subsections and will address each of the grounds for rejection separately by the prior art (*e.g.*, Papierniak and Holland).

#### A. The Papierniak Reference

The Papierniak patent addresses the problem of integrating data from a variety of sources (*e.g.*, Internet Service Providers such as AOL and Commerce Service Providers such as sharperimage.com) into a predetermined format for supporting collection of the Internal and/or electronic commerce data. (Papierniak, Col. 5, lines 39-44)

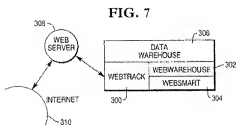
What the Papierniak patent does not appear to teach is pulling commerce data from the visiting computer – *e.g.*, the computer of the consumer him/herself. That is, the Papierniak system places the burden of tracking and sensing of customers to the ISPs those customers use and the servers on which the commercial sites and commercial transaction systems operate. There is no step in Papierniak of uploading a web page with data fields and mining code to the visitor computer and operating that data mining code on the visitor computer to obtain commercial and technical data. Instead, any commercial and technical data would be obtained from the ISP or CSP computers themselves and would be integrated within a separate database:

“From the user perspective, there are, at least, two types of users: visitors and the ISP’s/CSP’s customers.... The profile data related to the ISP/CSP customers should include, for example: company name... billing contact [etc.].... The visitor profile data, in addition to the domain name and IP addresses, depends on how much information the visited applications can entice the visitors to provide and what the visitors are willing to share with the ISP/CSP.... The capture of Web access activity requires interfaces to other network accessible systems such

as modem pools and routers.” (Papierniak Col. 15, line 52 to Col. 16, line 23 *emphasis added*)

It is clear then that tracked data is produced and maintained at the server side, rather than the client side, since when visitors not part of the ISP/CSP are tracked, the system depends upon an election by the visitor to manually enter the information based on requests made by the system. This occurs, for example, when a visitor would complete an online demographic survey. Another example would be the “interview questionnaire” format noted in Papierniak beginning Col. 20, line 38 with reference to FIG. 14.

The Papierniak system, using server-provided and maintained data, operates in stark contrast with that of the present invention which gleans data from automated processes taking



part at the client (visitor) machine using the data mining code to derive commercial information from transactions occurring over a web page. Not only does server-side data collection such as taught in Papierniak (and shown in FIG. 7 to the left) teach away from the present invention, but the present invention was developed to address the

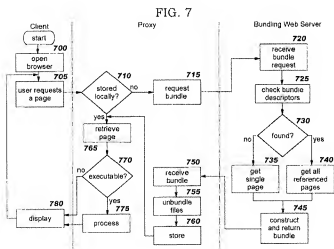
drawbacks of server-side data collection systems. These Papierniak systems require high levels of data sharing and cooperation between ISPs, CSPs, and data reporting agencies. As in the past, presently ISPs and CSPs do not lightly share such information with these data reporting agencies. The present invention does away with the need for such cooperation in that ecommerce data mining code is embedded within the served web pages themselves and automatically causes ecommerce reporting to a second server.

Papierniak does not teach, *inter alia*, several of the steps in claim 1 involving the operation of data mining on the visitor computer where such code is embedded within the web page. There is no suggestion in Papierniak of client-side tracking using embedded data mining code for commercial information as claimed in the present invention. Accordingly, it would be impossible to see how the teachings of Papierniak could be incorporated into a client-side tracking scheme since there is no suggestion of such a combination within the reference.

### B. The Holland Reference

The Holland reference is being asserted by the Examiner as teaching steps that are missing from the Papierniak reference. Specifically, the Examiner states that Holland data mining applications deduce visitor Internet use patterns and transmit an appropriately constructed “bundle” of web pages that the user may browse off-line. The Examiner goes on to state that Holland implicates that such techniques may be used “in an ecommerce market.”

We disagree with Holland’s applicability to the present claims. First, Holland constructs the bundle at the bundling web server (FIG. 7) and it is this server on which the data mining



software is implemented. There is no indication that data mining software is included within the web page(s) uploaded to the visitor computer as required in the claims. Furthermore, there is no reference within Holland that the client proxy 460 includes data mining code. Instead, the data mining code is clearly operable on the web page bundling server. As stated in the Holland Abstract, “data mining software may be used

advantageously with this technique, to increase the likelihood of constructing a bundle that will meet the user’s needs throughout the offline transaction.”

A careful reading of appropriate disclosure in Holland (Col. 4, lines 52-67, and Col. 5, lines 1-13) clearly shows that data mining would necessarily have to occur at the server prior to construction of the web page bundle. That is, repeated visits and requests for information from the server will establish the pattern of behavior, and it is this pattern of behavior that shapes which types of pages are included within the bundle. Since the bundle is constructed at the web page server and uploaded to the visitor computer at an initial request of the visitor, it would be impossible for data mining code to be operable on the visitor computer and still result in an appropriate bundle.

As proof that Holland teaches data mining code operable on the visitor computer, the Examiner has referenced a paragraph within the Holland Background of Invention section (Holland, Col. 4, line 52 to Col. 5, line 23). The data mining software products cited include



IBM's "SurfAid" and "Intelligent Miner" products. These products mine data on the web server or commercial server itself, rather than on the visitor computer, as evidenced by their marketing materials in which:

IBM's data mining capabilities help you detect fraud, segment your customers, and simplify market basket analysis. IBM's *in-database mining* capabilities integrate with your existing systems to provide scalable, high performing predictive analysis without moving your data into proprietary data mining platforms. Use SQL, Web Services, or Java to access DB2's data mining capabilities from your own applications or business intelligence tools from IBM's business partners. (<http://www-306.ibm.com/software/data/iminer/>) (emphasis added)

And,

Data mining is about discovering previously unknown patterns and unknown relationships in data records *from large databases*. This is different than statistics, as statistics are based on hypotheses. Pointing out unknown patterns and unknown relationships has the advantage to better and more quickly identify market niches, gaining insight to the behavior of your customers, so that customer reactions can be better predicted. Therefore, it is helpful to set up appropriate actions and plans. (<http://www-128.ibm.com/developerworks/db2/library/techarticle/dm-0506nicolussi/index.html>) (emphasis added)

Rather than teach data mining code embedded within web pages, Holland instead references data mining within the commercial databases themselves, as by log-files, which is exactly the type already noted and distinguished by the present invention. (see, e.g., Application, page 3, lines 13-15).

Moving past the Background section to the Holland invention itself, the Holland client proxy is a standardized application that would need to be installed prior to usage. This contrasts with the present invention which embeds data mining code into the delivered page without prior preparation.

Accordingly, since we cannot find any reference within Holland that data mining code accompanies the web page uploaded to the visitor computer, it is Appellant's view that Holland would not teach the steps of claim 1 of (a) uploading the web page including the data fields and data mining code to a visitor computer, and (b) operating the data mining code on the visitor computer to obtain technical and commercial data. The dependent claims include such a limitation and would likewise be allowable over the prior art.

Finally, the Examiner has stated that, “the data mining code is operable on the visiting computer as is disclosed by the claimed invention, as the only way this information can be obtained is via activity by said visiting computer.”

Appellant disagrees with the argument that the claim 1 step of “operating the data mining code on the visitor computer” (emphasis added) is the same as, or even equivalent to, “activity by said visiting computer.” In the first instance, data mining code is actually stored in memory and operating on the microprocessor of the visitor computer. In the second instance, data mining code operable on the web server collects the requests from a particular visitor computer and constructs a bundle of appropriate web pages which are then sent to the visitor computer. These web pages do not have data mining code embedded within them. That is, one in the technical arts would understand the limitation “operating the data mining code on the visitor computer” to mean an actual physical processing of the code on the visitor computer itself, rather than simply operating the data mining code on data stored in a web server corresponding to page requests and data entries by that visiting computer. In the Holland reference, then, there is no step of operating the data mining code on the visitor computer.

*D. There Is No Suggestion to Combine Features Of The Papierniak And Holland References*

All pending claims have been rejected under §103(a) as being an obvious combination of the references, Papierniak and Holland.

The Federal Circuit has been consistent in reversing the PTO when a rejection is made on the basis of hindsight, that is when an Examiner rejects the application under 35 U.S.C. §103(a) grounds as obvious under a combination of two or more patents without any specific suggestion within the patents to combine the features. In re Rouffett, 47 USPQ2d 1453 (Fed. Cir. 1998), the Federal Circuit refused to uphold an obviousness rejection, even where skill in the art is high, absent the specific identification of principal, known to one of ordinary skill in the art that suggests the claimed combination.

The Federal Circuit reemphasized the care to be taken when combining prior art references in obviousness findings in Ecolochem v. Southern Cal. Edison, 56 USPQ2d 1065 (Fed. Cir. 2000), stating that such absence of evidence to combine prior art references “is defective as hindsight analysis.” The Federal Circuit held similarly in In re Kotzab, 55 USPQ2d 1313 (Fed. Cir. 2000), reversing the PTO and stating that, “[i]dentification of prior art statements

that, in abstract, appear to suggest claimed limitation does not establish prima facie case of obviousness without finding as to specific understanding or principal within knowledge of skilled artisan that would have motivated one with no knowledge of the invention to make the combination in the manner claimed.”

Finally, the Federal Circuit has reaffirmed their view that the PTO used improper hindsight analysis to reject patent claims under §103(a) in the recent case of In re Lee, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002), stating that a specific suggestion in the prior art cited is required and not a simple citation to “common knowledge and common sense.” Lee includes a tour-de-force of case law directed to the issue of combining references including those as follows:

- “The factual inquiry whether to combine references must be thorough and searching. . . . It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with.” (Lee, 277 F.3d at 1343)
- “A showing of a suggestion, teaching, or motivation to combine the prior art references is an essential component of an obviousness holding.” (*quoting* Brown & Williamson Tobacco Corp. v. Philip Morris, Inc., 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000))
- “Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.” (*quoting* C.R. Bard, Inc. v. M3 Systems, Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998))
- “There must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant.” (*quoting* In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998).)
- “Teachings of references can be combined *only* if there is some suggestion or incentive to do so.” (*quoting* In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988) (emphasis in original))

The sections above remark on the prior art’s failure to teach all elements of the claims.

Additionally, the Patent Office has additionally failed to display the rigor required by the Federal Circuit holdings in demonstrating a suggestion within the art that the cited prior art references should be combined. Each of the patents recite multiple and independent methods for executing data analyses. No motivation has been presented for picking and choosing elements from various independent embodiments across multiple patents without the inference of hindsight.

Even more important than the failure to fulfill the burden of proof with regard to a combination of references, however, is the fact that the combination cited still would not teach all limitations of the claims. The Papierniak and Holland reference server-side data mining techniques such as those cited within the present application as known in the prior art. Visitor-side data mining of commercial data, however, is not stated or suggested. Accordingly, rejection of the claims under §103(a) would be inappropriate.

#### **VIII. CLAIMS APPENDIX** **37 CFR § 41.37(c)(1)(viii)**

A copy of the claims involved in the appeal, Claims 1-9, are attached hereto as an appendix, entitled Claims Appendix.

#### **IX. EVIDENCE APPENDIX** **37 CFR § 41.37(c)(1)(ix)**

No evidence was submitted pursuant to 37 CFR §§ 1.130, 1.131 or 1.132 of this title, nor was any other evidence entered by the Examiner and relied upon by the Appellant in the appeal.

#### **X. RELATED PROCEEDINGS APPENDIX** **37 CFR § 41.37(c)(1)(x)**

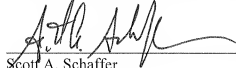
No related proceeding was identified pursuant to 37 CFR § 41.37(c)(1)(ii) of this section.

### CONCLUSION

For the foregoing reasons, Appellant requests that the Board reverse the Examiner's rejections to Appellant's claims.

Respectfully submitted,

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**VIII. CLAIMS APPENDIX**  
**37 CFR § 41.37(c)(1)(viii)**

The text of the claims on appeal, 1-9, are as follows:

1. A method for tracking and reporting electronic commerce activity over a web site comprising:

storing a web page on a first server coupled to a wide area network, said web page including data fields reflecting commerce transaction activity and data mining code;

uploading the web page including the data fields and data mining code to a visitor computer responsive to a request over the wide area network from the visitor computer;

accepting commerce information within the data fields of the web page at the visitor computer to form a completed web page;

operating the data mining code on the visitor computer to obtain technical and commercial data; and

receiving the technical and commercial data at a second server.

2. The method for tracking and reporting electronic commerce activity of claim 1 further including the steps of:

receiving the completed web page at the first server;

generating an order confirmation web page incorporating the commerce information from the data fields of the completed web page, said order confirmation web page including the data mining code; and

uploading the order confirmation web page to the visitor computer.

3. The method for tracking and reporting electronic commerce activity of claim 2, further including the steps of:

associating variables within the data mining code to the commerce information within the order confirmation page;

confirming the commerce information at the visitor computer;

receiving the order confirmation page from the visitor computer at the first server responsive to the step of confirming the commerce information; and

receiving the associated variables at the second server responsive to the step of confirming the commerce information.

4. The method for tracking and reporting electronic commerce activity of claim 3, wherein the step of associating variables includes the steps of associating a variable with a product name of the commercial transaction.

5. The method for tracking and reporting electronic commerce activity of claim 3, wherein the step of associating variables includes the steps of associating a variable with a product category of the commercial transaction.

6. The method for tracking and reporting electronic commerce activity of claim 3, wherein the step of associating variables includes the steps of associating a variable with a number of products purchased in the commercial transaction.

7. The method for tracking and reporting electronic commerce activity of claim 3, wherein the step of associating variables includes the steps of associating a variable with a unit price of the commercial transaction.

8. The method of claim 3, further comprising the steps of:  
compiling the variables into a commercial transaction report; and  
posting the report for viewing over the wide area network.

9. The method of claim 1 further including the step of embedding the commercial data within a URL request directed at the second server.